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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,019	09/18/2003	Michael W. Vice	10030017	9142

7590 10/27/2005

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EXAMINER

NGUYEN, KHANH V

ART UNIT	PAPER NUMBER
2817	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,019	VICE, MICHAEL W.	
	Examiner	Art Unit	
	Khanh V. Nguyen	2817	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 March 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 18 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/17/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears that claim 17 discloses an additional “pair of mutually coupled inductors”. As such, applicant needs to show the difference between “pair of mutually coupled inductors” in claim 17 and “pair of mutually coupled inductors” in independent claim 11. Should “pair of mutually coupled inductors” in claim 17 be called as “second pair of mutually coupled inductors”. Also, see claim 7.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-16, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhou et al. (IEEE Journal of Solid-State Circuits, Vol. 33, No. 12, December 1998).

Regarding claims 1, 11, Zhou et al. (Fig. 3) disclose a differential amplifier comprising: an input stage (1) comprises a pair of transistors (M1, M2); a pair of mutually coupled inductors (T1/T2) that are arranged to bias the transistors (M1, M2) via their drains.

Regarding claims 2, 3, 12, 13, wherein the mutually coupled inductors (T2) comprise a transformer (T2) which has an inherent function as disclosed in claims 3, 13.

Regarding claims 4-6, 14-16, wherein T1 can be read as the mutually coupled inductors coupled to inputs via gates of transistors (M1, M2) and having the functions thereof.

Regarding claims 8-10, 18-20, wherein the mutually coupled inductors (T2) are coupled in series with a first terminal (drain) of each transistor (M1, M2); a mutually coupled inductors (T1) can be read as a second pair that are coupled in series with a second terminal (gate) of each transistor (M1, M2); and the functions as disclosed in claims 10, 20 would be inherent in the reference circuit.

Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Cassan et al. (IEEE Journal of Solid-State Circuits, Vol. 38, No. 3, March 2003).

Regarding claims 1, 11, Cassan et al. (Fig. 7) disclose a differential amplifier comprising: a pair of transistors (Q1); a pair of mutually coupled inductors (L_D) that are arranged to bias the transistors (Q1) via their drains.

Regarding claims 2, 3, 12, 13, wherein the mutually coupled inductors (L_D) comprise a transformer (M_D) which has an inherent function as disclosed in claims 3, 13.

Regarding claims 4-6, 14-16, wherein (L_{M1}) can be read as the mutually coupled inductors coupled to inputs via gates of transistors (Q₁) and having the functions thereof.

Regarding claims 7, 17, wherein the mutually coupled inductors (L_S) coupled in series with a source of each transistor (Q₁).

Regarding claims 8-10, 18-20, wherein the mutually coupled inductors (L_D) are coupled in series with a first terminal (drain) of each transistor (Q₁); a mutually coupled inductors (L_{M1}) can be read as a second pair that are coupled in series with a second terminal (gate) of each transistor (Q₁); and the functions as disclosed in claims 10, 20 would be inherent in the reference circuit.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHANH V. NGUYEN
PRIMARY EXAMINER